



IFW/AF

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/619,647      Confirmation No.: 1264  
Applicant(s): Harper, Jr.  
Filed: 7/14/2003  
Art Unit: 2833  
Examiner: Gushi, Ross N.  
Title: Electrical Contact Assembly With Insulative Carrier,  
Stapled Contact Attachment and Fusible Element

Attorney Docket No.: 003A.0092.U1(US)  
Customer No.: 29,683

Commissioner For Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Reply Brief

Sir:

This is in reply to the Examiner's Answer mailed 12/6/2004.

In the Examiner's Answer, the Examiner makes reference to In re McLaughlin, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971) as support for his conclusion that a proper obviousness analysis has been used. However, In re McLaughlin states "so long as it takes into account **only** knowledge which was within the level of ordinary skill at the time the claimed invention was made and does not include knowledge gleaned only from applicant's disclosure" (emphasis added). In the present case, the cited art does not disclose or suggest placing a fusible element on a deflectable portion of a contact. There is only a suggestion of placing a fusible element on a stationary portion of a contact. A person skilled in the art would normally not put a fusible element (solder ball) on the end of a movable section of a contact because there is an

obvious risk that the soldered connection would be damaged when the movable section deflects. However, applicant has discovered that this risk is minimal in a small size connector. Because it would not have been obvious for a person skilled in the art to put a fusible element (solder ball) on the end of a movable section of a contact (because there is an obvious risk that the soldered connection would be damaged when the movable section deflects), it would not be obvious to combine the references as the examiner has attempted to do. Contrary to In re McLaughlin, the examiner has not taken into account **only** knowledge which was within the level of ordinary skill at the time the claimed invention was made, and the examiner appears to have included knowledge gleaned only from applicant's disclosure.

The examiner has stated that the tabs bending back towards the base would have been an obvious if not natural consequence of the crimping die and would have been desirable to best secure the contact to the substrate. It appears that the examiner is now raising an issue that bending back the tabs towards the base would have been inherent ("natural consequence"). This is clearly incorrect. It is not "inherent" to bend the tabs into a "stapled" type of configuration shape. In fact, Fig. 12 of Grabbe clearly shows that it is not inherent, and therefore, is not a natural consequence. Nor is there any suggestion or teaching in the cited art to change the structure shown in Fig. 12 of Grabbe into applicant's claimed stapled shape with the tabs extending back towards a main section of the base.

In regard to the second paragraph on page 9 of the examiner's answer and claim 15, Grabbe does not disclose or suggest a compound curve at the contact surface.

In view of the arguments presented above, it is respectfully requested that the Examiner's rejections of Claims 1-22 be reversed.

Respectfully submitted,

Mark F. Harrington

Mark F. Harrington (Reg. No. 31,686)

2/1/05

Date

**Customer No.: 29683**

Harrington & Smith, LLP

4 Research Drive

Shelton, CT 06484-6212

203-925-9400

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail on the date shown below in an envelope addressed to: Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

February 1, 2005

Date

Debra Perge

Name of Person Making Deposit